

Claims

1. An apparatus for cutting an oval hole in the wall of a pipe, said apparatus comprising a baseplate (1) with elements (18) for securing a pipe to be cut, a carriage (2) supported on top of the baseplate (1) for linear movement along runners (3), a drive pulley (4) driven by a power unit (7) and having an opening (8) for a tool (20) and an internal toothed rim (9) meshing with an external toothed rim (19) of the tool (20) for rotating the same, a gear (22) meshing with a second toothed rim (23) of the tool (20) for rotating it slowly, whereby a cutter head (24) is carried by said slow rotational motion relative to the carriage (2) along a circular path, the cutter head (24) rotating at the same time about its own axis driven by the toothed rims (9, 19), **characterized** in that adapted for rotation along with the drive pulley (4) is a cogged wheel (10), which through the transmission of a cam lever (11) is adapted to drive a shaft (12) whose rotational motion is transmitted on the one hand to drive the gear (22) and on the other hand to work the carriage (2) back and forth in relation to the baseplate (1), a round-trip displacement (2xa) being equal to a difference between the major axis and the minor axis of a desired ellipse.
2. An apparatus as set forth in claim 1, **characterized** in that the cam lever (11) is mounted on the shaft (12) with a freewheel clutch (13) and the shaft (12) is mounted on the carriage (2) with a second freewheel clutch (14), and that the senses of rotation allowed by the freewheel clutches (13, 14) are opposite to each other.
3. An apparatus as set forth in claim 1 or 2, **characterized** in that mounted on the shaft (12) is a second gear (21) rotating therealong to rotate the gear (22) which drives the tool (20, 23).
4. An apparatus as set forth in any of claims 1-3, **characterized** in that the shaft (12) has its bottom end provided with a crank (15) in engagement with an opening (16) of the baseplate (1), which is elongated in a direction perpendicular to the runners (3), and that the crank (15) has a crank lever with a length (a) that is adjustable.